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Using Noncognitive Variables to Predict the Grades
and Retention of Hispanic Students

for helping students identify and cope with racism

Jairo N. Fuertes and William E. Sedlacek

Research Report #9-94

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Summary

A ten-year study of 156 Hispanic college students revealed that their ability to identify and combat perceived interpersonal and institutional racism, as measured by the Noncognitive Questionnaire, was predictive of their grades the first three semesters in college. Results also showed that Noncognitive variables were not predictive of Hispanic student retention over a nine semester period. The implications of these findings for student affairs professionals are discussed and a five-step program for helping students identify and cope with racism is outlined.

Using Noncognitive Variables to Predict the Grades and Retention of Hispanic Students

Hispanics are the fastest growing minority group in the United States and the second fastest growing minority group in higher education (American Council on Education, 1993). During the 1980's their numbers grew at five times the rate of the rest of the U.S. population, to a total of 22,354,059 in 1990 (U.S. Department of Commerce, Bureau of the Census, 1991). In higher education Hispanics' enrollment increased by 61% between 1980 and 1990, from 472,000 students to 758,000, the second largest increase of any ethnic group in the U.S. (The Chronicle of Higher Education, 1992).

Given the increasing presence of Hispanics in the general population and in higher education, the admission and retention of Hispanic college students has become of primary focus to student affairs professionals (Chapa & Valencia, 1993; Fuertes & Sedlacek, 1993; Reyes & Valencia, 1993). While colleges and universities continue to rely, at least in part, on high school cumulative grade point averages

and SAT scores to select the best students, there has been considerable debate as to whether SAT scores are the best predictors of the academic success of minority students (Sedlacek, 1993). Arguing that non-academic variables are of importance in student selection and retention, Tracey and Sedlacek (1984, 1985, 1987, 1988, 1989) conducted a series of studies which have shown that eight noncognitive variables, as measured by the Noncognitive Questionnaire (NCQ; Tracey & Sedlacek, 1984), are better predictors than SAT scores of the grades and retention of non-traditional (e.g., African-American, Asian-American) and traditional students. It has not been shown, however, if noncognitive variables are valid predictors of Hispanic students' grades and retention in college.

The noncognitive variables that make up the NCQ are the following: a) Positive self-concept or confidence, i.e., the student demonstrates a strong self-feeling, strength of character, determination, and independence; b) Realistic self-appraisal, especially academic. The student recognizes and accepts any deficiencies and works hard at self-development; c) Understands and deals with racism. The student is a

realist based upon direct or indirect experience of racism. He or she is assertive and resourceful in coping with prejudice; d) Prefers long-term goals to short-term goals, i.e., is able to respond to deferred gratification; e) Availability of a strong support person to whom to turn to in crisis; f) Successful leadership experience in any area pertinent to his/her background (e.g., church, sports, noneducational groups); g) Demonstrated community service. He/she has been involved in his/her cultural community; h) Knowledge acquired in a nontraditional field. The student exhibits an ability to obtain and retain, and retrieve information in non-academic areas.

The purpose of this research study was twofold. First, whether the eight noncognitive variables listed above predict the grades and retention of Hispanic college students will be determined and second, a model based on noncognitive variables for helping Hispanic students improve their academic performance in college will be presented.

Method

Procedure

The NCQ was administered over a ten-year period to 156 (51% female) entering Hispanic freshmen at a large, predominantly White university in the northeast. During their visit to the Counseling Center as part of their orientation to the campus, students were randomly selected and invited to complete the NCQ. More than 90% of all students attend orientation, thus the sample is considered to be representative of new students at the campus.

Instrument

The NCQ is designed to assess the eight noncognitive variables described above via 23 items. There are two nominal items on educational expectations, 18 Likert-type items (range: 1 to 5 from strongly agree to strongly disagree) on expectations about college and self-assessment, and three open-ended questions on present goals, past accomplishments, group memberships, and offices held (range: 1 to 3). Test-retest reliabilities of the NCQ items over a two-week interval ranged from .70 to .94 for each item, and the median test-retest reliability was found to be .85

(Tracey & Sedlacek, 1984). Construct validity on the eight noncognitive dimensions was demonstrated using factor analysis (Tracey & Sedlacek, 1984).

Analyses

NCQ scores were used to predict grades (GPA) and retention using Pearson Product Moment correlations and discriminant analysis at the .05 level. Students' grades and enrollment status were retrieved from university records; confidentiality was strictly observed.

Results

Table 1 shows Pearson Product Moment correlations of NCQ scores and grades. The noncognitive variable "ability to identify and cope with racism" was correlated with GPA for the first and third semesters in college. The remaining noncognitive variables were not predictive of students' GPA on any of five semesters analyzed over a four and a half year period. Discriminant analysis results showed that the NCQ did not predict Hispanic student retention.

Discussion

These results partially support previous research findings (e.g., Bandalos & Sedlacek, 1989; Barbarin,

1981; Boyer & Sedlacek, 1988) which showed that nontraditional students (e.g., ethnic minorities, immigrants, and international students) who understand racism and are prepared to deal with it perform better academically at predominantly White schools.

Sedlacek (1993) has described his use of the term "racism" as generic, i.e., it is intended to include all "isms". He describes high scorers on this variable as students who understand the role of the "system" in their life and how it treats nontraditional persons, often unintentionally. They have developed a method of assessing the cultural/racial/gender demands of the system and respond accordingly, assertively if the gain is worth it, passively, if the gain is small or the situation ambiguous. They do not blame others for their problems or appear as a "Pollyanna" who does not see an "ism" that works against them. Low scorers are described as unsure or ignorant of how the "system" works and are preoccupied with racism or do not feel racism exists. They blame others for their problems and react with the same intensity to large and small issues concerned with racism. They do not have a successful method of handling racism that does not

interfere with their personal and academic development.

These results suggest that Hispanic students who are "high scorers" on the racism variable as described above, i.e., they are knowledgeable, assertive, and flexible in coping with unfair university policies and/or inter-personal treatment, demonstrate the best academic progress early in their academic career (in this case, the first three semesters in college).

Model for Improving Academic Performance

The next section will present a five-step model for helping Hispanic students cope with racism during the first year in college. The model is intended to help student affairs professionals who are interested in promoting the academic performance of Hispanic students.

Step 1

We begin by suggesting that Hispanic students be sensitized during summer orientation to the difference between individual and institutional racism and shown how to cope with it. It has been shown that Hispanic students are often able to identify racism at an interpersonal level, but are often unaware of institutional policies or "realities" that tend to work

against their best interests (e.g., lack of Hispanic faculty, staff, and/or bilingual student affairs professionals; Fuertes, Sedlacek, & Westbrook, 1993). Students could be sensitized via video vignettes or skits prepared by upperclass students on how to identify and cope with racist attitudes and behaviors from other students and/or professors.

Step 2

Hispanic students should be made aware of support units and services (e.g., the counseling center) on campus which are in place to mediate occurrences of racism, sexism, etc. The results from this study seem to suggest that students who know their rights and responsibilities, as well as those of other students, staff and faculty members, are best able to cope academically the first three semesters on campus. Students could be made aware of these policies and procedures as part of summer orientation or included as part of a 1-credit student development course offered to first-semester freshmen.

Step 3

Fuertes, Sedlacek, & Westbrook (1993) found that Hispanic students who exhibited bicultural attitudes

and behaviors (i.e., they had positive feelings about participating in Hispanic and non-Hispanic activities and groups) were most likely to have support networks in college and to feel a part of the campus community. Salazar (1990) suggests that Hispanics who accommodate to the campus majority culture, instead of assimilating or isolating themselves from it, are most likely to succeed academically in college. We suggest that during summer orientation, in first-year student development courses, and in overall campus activities programming, an emphasis be made to Hispanic students that they participate in Hispanic-related and other-culture(s)-related activities. Students could be rewarded for their activities by credit, a reward, or a certificate of recognition.

Step 4

Involves peer feedback sessions during the first year on campus on positive or negative experiences at the university. These sessions can serve as an emotional outlet as well as a social event for new students on campus. Such sessions could be organized by the counseling center, the department of resident life or any other support unit on campus. These group

peer feedback sessions should attempt to simulate group psychotherapy sessions so that issues such as confidentiality, an emotionally safe climate, and the processing of painful material are addressed.

Step 5

The last aspect of our model includes a mentoring program in which the student is matched with an graduate student, staff, or faculty member, who acts as a mentor and advocate for the student during the first year on campus. The mentor may serve as a direct source of help for the student or could be trained to provide referrals so that students get the help they need.

Limitations and Future Research

This study has demonstrated the validity of the NCQ in predicting Hispanic students' grades their first three semesters in college. However, more research is needed in the areas of Hispanic student selection and retention. This study did not examine the predictive validity of high school GPA's on Hispanic students' grades and retention in college. Future research should examine the role of high school GPA's in Hispanic students' performance in college,

particularly, in comparison to the NCQ. Additionally, Fuertes & Sedlacek (In press) found that SAT scores predicted Hispanic students' grades up to seven semesters after matriculation in college. Future research may focus on developing a parsimonious model of academic performance prediction for Hispanics which incorporates, high school GPA, SAT or ACT scores, as well as noncognitive variables. Researchers may examine the validity of such a model with Hispanic students in different areas of study in college, for example engineering vs. psychology majors. For some students, high SAT math scores and certain noncognitive variables may be the best predictors of academic performance (both grades and retention), and for others SAT verbal scores and certain noncognitive variables may be best predictors of academic performance. Finally, researchers need to consider within-group differences and pay close attention to the role of variables such as acculturation level, race, and socioeconomic status in mediating the academic performance of Hispanics in higher education.

Table 1. Zero-Order Correlations Between NCQ Scores
and Cumulative GPA*

NCQ	Semester	
	Sem1	Sem3
Self Concept	.10	.08
Realistic Self Appraisal	.05	-.02
Handling Racism	.22*	.20*
Long Range Goals	.12	.10
Support Person	.07	-.03
Leadership	.10	.09
Community	.03	.01
Nontraditional Knowledge	-.04	.05

* Significant at the .05 level

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